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5. OBSERVATIONS ON CHICK MORTALITY IN DARTER *ANHINGA MELANOGASTER* IN GIR FOREST

The Darter *Anhinga melanogaster*, also known as the Snakebird, is widely distributed from Africa through southern Asia to the Indo-Chinese subregion, Philippines, New Guinea, Australia, New Zealand (Ripley 1982), tropical and subtropical zones of America, and also occurs in warm temperate zones (del Hoyo *et al.* 1992). In South Asia, it is distributed throughout the Indian Union, Bangladesh, Pakistan, Sri Lanka and Myanmar (Ali 1996). The nesting season of the Darter varies from June to August in northern India and from November to February in southern India (Ali 1996). In August 2001, we came across a breeding site of Darter near a natural pool locally known as "Kodiari Guna" near the Kamleshwar reservoir in Gir forest. Ten nests were constructed in a Jamun tree (*Syzygium cumini*) that was c. 11 m high. The nests were built among branches bifurcating from the bole (53 cm GBH). The pool also harbours three to four Muggers (*Crocodylus palustris*). The nests were the typical twig platforms of the species, with a cup-like depression in the centre (Ali 1996). Most of the nests (6) were constructed in the central part of the tree; one nest was on the extreme left side, and the remaining three to the right. Some of the centrally constructed nests were located very close (<1.5 m) to each other. The lowest nest was built 5 m above ground level and the highest was located at 9 m. It seems that the Darter prefers using twigs of tree or shrubs which are available around the breeding site for constructing the nest, as only twigs of the Jamun tree were used for building the nest.

Our observation started when the chicks were approximately 3 days old. Four to five chicks were seen in each nest, except one where incubation was still on. There were initially 39 Darter chicks in nine nests, but late hatching of eggs in some nests increased the total to 44 after two weeks. Of these, only 27 (61%) survived to reach the flight

stage. Maximum mortality was observed after two weeks. One nest located at the extreme right, comprising of four chicks and a parent bird, suffered complete mortality within three weeks from hatching, probably due to an attack by a predatory bird. The carcasses of three chicks and an adult bird were found embedded in a *Lantana* bush below the breeding site.

Predation on Darter chicks was never observed directly, but a Changeable Hawk-Eagle (*Spizaetus cirrhatus*) was once seen circling low near the breeding site during the evening. Three destroyed eggs were later found below the tree. The bigger chicks, which regularly move and trample the nests, may also be responsible for the destruction of eggs. As some nests were constructed very close to each other, some chicks tried to beg for food from the parent bird of the adjoining nest. This led to aggressive behaviour from the parent bird, which vigorously jerked its 'S' shaped neck forward to stab the chicks of other birds with its pointed bill.

ACKNOWLEDGEMENTS

We thank Dr. Belim Hanif and Shri Ali N. Bloch for assisting us during the fieldwork and observations. We also thank the field staff of Gir National Park and Sanctuary for their cooperation and help.

February 19, 2002

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